



CAUTION!

- Remove power before wiring input or output connections.
- Follow instructions carefully to avoid personal injury or damage to the electronics.

1. Description

The Signet 2650 Amperometric Electronics provide the polarization voltage and signal conditioning required by all Signet Amperometric Sensors. Sophisticated circuitry makes system setup and verification easy.

Features:

- Passes data stored in sensor memory, such as factory calibration data, service time, range and more.
- Signet's patented DryLoc® connector provides quick assembly and a secure connection. Gold-plated contacts and an O-ring seal ensure a waterproof and reliable interconnect to the sensor.
- Separate drive electronics from sensor make for easy sensor replacement without running new cable.
- DryLoc connectivity allows easy sensor removal for calibration.

2. Installation - Tee Fitting

① Insert sensor fully into fitting. Align tab on sensor with notch on fitting. A thin film of non-petroleum based grease applied to the O-rings can ease installation.

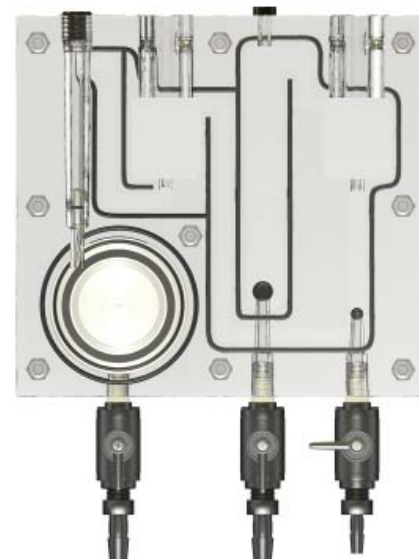
② Install the yellow nut on to the fitting and hand tighten. Do Not Use Tools.

③ Align the 2650 Electronics with the pins on the sensor. Engage it by gently turning the lock ring ¼-turn counter-clockwise.

**Do Not Use Lubricant or Sealing Tape on Threads.
Do Not Overtighten.**

4630 Flow Cell Installation

The bottom yellow nut is not used when using the 2650 electronics with the Signet 4630 flow cell.

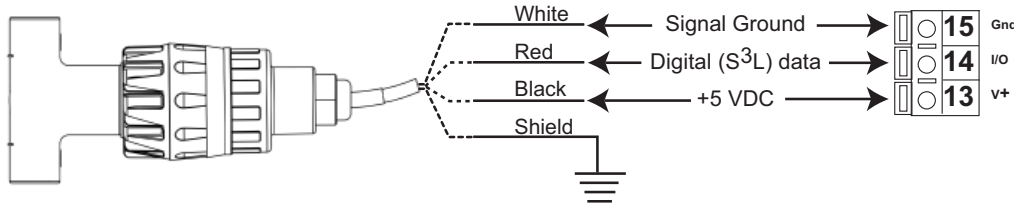


Signet 4630 flow cell

3. Wiring

Chlorine Digital (S³L) Wiring

- Remove approximately 10 mm (0.4 in.) of insulation and tin each conductor before inserting into terminals.



- Refer to the wiring diagram above to connect the 2650 cable to the terminals on the 8630 Chlorine Transmitter.
- Maximum cable length is 30 m (100 ft).
- Cable should have noise immunity for the sensor signal of up to 30 m (100 ft).
- Cable capacitance must be less than 30 pF/foot.

4. Technical Data

Signet 2650 DryLoc Amperometric Electronics

General

Compatible Sensors:

All Signet Amperometric DryLoc Sensors

Compatible Instruments:

Signet 3-8630-3P Chlorine Transmitter

Mounting:

DryLoc connection

Materials:

Valox® (PBT)

Cable:

4.6 m (15 ft) 3 conductor shielded, 22 AWG

Shipping Weight:

0.64 kg (1.14 lb)

Performance

Electronics Accuracy:

< 5 nA or 1% of reading, whichever is greater
@ 25 °C over full input range

Temperature:

± 1.0 °C (PT1000) over full operation range
(when calibrated at ambient temperature)

System Response:

500 ms (update rate)

Operational Range:

± 450 mV

Resolution:

0.1 nA

* Valox® is a registered trademark of SABIC Innovative Plastics

Electrical

Input Specifications:

Sensor: Raw signal

Temperature: PT1000 RTD

Output Specifications:

Digital (S³L):

Serial ASCII, TTL level 9600 bps

Maximum Cable Length:

30 m (100 ft)

Power Supply Input:

Digital (S³L) mode:

5 to 6.5 V ± 10% , 3 mA max

Environmental

Storage Temperature:

-20 °C to 85 °C (-4 °F to 185 °F)

Operating Temperature:

0 °C to 85 °C (32 °F to 185 °F). Electronics only

Relative Humidity:

0 to 95%, non-condensing (no electrode connected)

Enclosure Requirements:

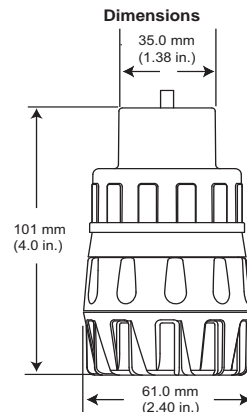
NEMA 4X/IP65 with electrode connected

Standards and Approvals

CE

Manufactured under ISO 9001 and ISO 14001

♻️ China RoHS (Go to www.gfsignet.com for details)



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